MARINE REVIEW.

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The Taxation Question Again.

Cleveland newspapers have again taken to criticising vessel owners who have seen fit to organize stock companies and establish headquarters in surronnding towns where taxes are not excessive. Arguments against action of this kind on the part of vessel owners are not new, but just now certain harbor improvements are contemplated in Cleveland, and as the newspapers have seen fit to accuse the vessel interests of refusing to pay their share of the city's expenses, while deriving most benefit from these improvements, some answer has been made regarding this question of taxes. A vessel owner who has not listed his property outside the city, and who is therefore free to talk on the subject, writes as follows to one of the local papers:

"The vessel owners referred to in your articles on taxation were badly treated while they listed their boats in Cleveland. The assessors and board of equalization used what is known as the Lloyd's Register for determining values of vessel property. Valuations in this register are far above selling prices, and are quoted for insurance purpose only. Insurance companies do not care how high they place the values, as they insure for only five-sixths of the register value, and then have one-third off new for old on partial losses; and, as the bulk of the losses are partial, rather than total, you will see that they were only paying out on a basis of about one-half what was in the register. Where a total loss occurs, of course, they pay the five-sixths, but their premiums are very high, and the greater valuation, the greater income they have, the intention being, when they take a risk, to receive the premium and hope not to pay the loss.

"Another evil to which vessel owners were subjected at this port was that if a man bought a vessel and paid one-fourth down, and gave a mortgage for the balance of three-fourths, they made him pay taxes on the full amount, notwithstanding that the owner of the mortgage should pay taxes on his mortgage.

"Now these are the principal grievances in a money way, but these officials engaged a party known as 'the tax smeller,' Morgenthaler, to annoy almost everybody who had any property listed in the county. He was getting a large percentage on all he could wring out of the property owners, and many people submitted to his methods rather than go into litigation. If you will make proper investigation you will find it is not alone vessel property that has been driven from the district, but you will find that owners of many other kinds of property have been compelled to change their places of residence on account of these abuses.

"When this kind of work was begun we happened to have a lot of very new and very smart officials who were going to bring about a reform. They have brought it about, and now are the people pleased with it? If this vessel property you speak of is not far enough away from the district and you would like to legislate it into the district, we will go still farther away. Vessel owners will not be brought into a district where conditions are so unreasonable and where they have so much annoyance, even at the penalty of changing their places of residence altogether, as many others have already done.

"It is a question in the writer's mind whether boats should be taxed at all in the port where they are owned, as they use every port on the lakes as frequently as they do the port from which they hail. If they should pay for use of harbors, as you make the point in your article, why not pay for all the harbors they use? The Cuyahoga river is being allowed to fill up with mud and sand, and it is not often our boats come here anyhow. They go to Lorain, Fairport, Ashtabula and Buffalo many times where they come to Cleveland once. We notice also that vessels are subject to sewer tax in Cleveland, though they do not often run in the sewers"

Under present customs laws no charge is made by collectors of customs for furnishing abstracts of titles to vessels. The government pays collectors for this work. It is thought, however, that a fee of $1 should be paid for each certificate of this kind, and the United States senate a few days ago passed a bill establishing such a charge. The measure has not as yet been presented to the house.

Japan proposes to build up her commercial navy by giving subsidies to ship builders for every ton above 1,000, and to ship owners for all ships of 1,000 tons that can make ten knots an hour, the subsidy being increased for every 500 tons additional burden or every knot additional speed.

Chicago's Loss of Lake Trade.

Chicago, Ill., January 30—This city is at last awakening to the fact that it is not keeping pace with its competitors for lake commerce. The river is filling up, and the city has no money to dredge it out. Everything on the river is behind the times. Delays in unloading coal, on account of antiquated appliances, together with heavy bills from obstructions in the channel, are driving Chicago coal shippers out of the western field. In short, this city is handicapped in every direction, in meeting the competition of its lively rivals at the head of Lake Superior and along the west shore of Lake Michigan.

All this has led to a movement to get the general government to take charge of the river. Several meetings have been held at the office of the commissioner of public works; committees have been appointed, and an active crusade to that end has been inaugurated. It used to be that only marine men could be interested in any movement for the betterment of Chicago river, but now the vast elevator, coal, lumber, manufacturing and allied interests along the river are working hard to have something done which will tend to preserve an open channel. Even the railroads, which have freight docks, are coming into camp. The day seems to be past when attempts to keep out obstructions were denounced in some of the newspapers as "tugmen's kicks." Had it not been for the small band, which made the fight for the Chicago river when it was an unpopular thing to do, it would have been closed to vessels long before this. The interests which had tens of thousands of dollars at stake to every dollar of the tugmen stood aloof. It was so much nicer to let the other fellow wage an unpopular contest.

The situation now is most peculiar. The general government claims jurisdiction over the river, and enforces it by allowing no bridge to be built without the consent of the secretary of war. It also enforces its authority to order the removal of all unreasonable obstructions to navigation. Beyond this, the government does not go, and no appropriations have ever been made for the improvement of the stream. The drainage board also claims jurisdiction over the river as a part of the drainage system. By formal resolution, the drainage trustees have assumed authority to forbid any obstruction which might prevent the free flow of water through it. Third and last comes the city of Chicago, which has hitherto dredged the channel, maintained police authority over the movement of vessels and regulated the river the same as a street, which in one sense it is.

In view of the conflicting claims for jurisdiction, Major W. L. Marshall, the United States engineer, has been steadfast against an appropriation for any improvement, so long as the city continued to empty its sewers into the river. He has held that it was not the duty of the general government to care for Chicago's sewage. The entire system of city sewerage is based on the use of the river, and that now can not be changed. Nor can the tunnels be lowered except at a great and prohibitory expense. The problem of putting Chicago river in shape to meet the demands of the 20-foot channel seems to be past solution. If nothing is done, the port before long will be like Waukegan and Kenosha, where the water is too limited for even the old canalers, letting alone any preparation for the 20-foot channel.

There are several instances on record of mending a broken shaft at sea, but few of making a new propeller. Yet, that is what the chief engineer of the steamer Strathnevis had nearly accomplished when she was taken in tow after having been a month helplessly adrift on the Pacific. This propeller was constructed by heating iron sheets, cutting them to the right measurements and hammering them into the proper shape. It had a length from tip to tip of 7 feet 6 inches, and by bolting the sheets together he obtained a thickness of from one-half inch at the tip to three inches at the boss. Straps were bolted from tip to tip to hold the blades rigid and holes were bored through the boss. Had any favorable weather occurred it was the intention to shift the cargo sufficiently to tip the ship and bolt this ingenious contrivance to the shaft, and there is no doubt that its use would have given the ship a speed of from three to five knots.—Marine Journal.

M. E. B. A. No. 51, Muskegon, Mich.: President, Don McMillan; vice president, Harry O'Hara; treasurer, A. A. Green; corresponding and financial secretary, James Cummings; recording secretary, Henry Connell; chaplain, Don McMillan; conductor, E. V. Barry; doorkeeper, Frank White.

Lake Freight Matters.

There is not now any more indication of sales of ore for 1896 than there was two months ago, and it is quite generally agreed that nothing will be done until after March 1. Among ore men of Cleveland now out of the city or who are preparing to leave on trips to Cuba, Florida, the Bermudas and other places are the following: Col. James Pickands, H. G. Dalton of Pickands, Mather & Co., W. D. Rees of the Lake Superior and Republic iron companies, L. B. Miller and A. B. Conkey of Oglebay, Norton & Co., F. C. Smith who is with E. C. Pope, Capt. Thomas Wilson and others. This departure from the city on vacations of men most interested in the ore business certainly does not indicate prospects of an immediate settlement of business for next year.

Within the past few days reference has been made to the charter of the Josephine, Thomas L. Parker, and possibly one or two other boats controlled by Chicago owners, to move some ore next season from the head of Lake Superior at $1.10. This is not a new transaction. It was understood some two months or more ago that these vessels were engaged by Pickands, Mather & Co. of Cleveland at the rate named, but it was also understood that special conditions, very probably light draft of water at the point of delivery, attended the charter.

Lake coal shippers have as yet done little towards next season's business, and there is no talk among them about the contracts that are usually made on soft coal. The mining question is generally settled and it is understood, of course, that prices of soft coal will be somewhat higher than they were a year ago, mainly on account of increased labor costs. The contract of the Grand Trunk Railway Co. does not bring up the question of lake freights, as this coal has been moved in the past almost entirely by rail, but this contract is always interesting as it is among the first to be let. Charles M. Hays, general manager of the Grand Trunk, has issued a circular asking for bids. The requirements and places of delivery are as follows: Portland, 30,000 tons, gross; Chaudiere Junction, 12,000 tons, gross; Montreal, in company's coal yard, 70,000 tons; Montreal, at company's workshops, 10,000 tons; Montreal, 20,000 tons; Brockville, 36,000 tons, net; Detroit, D. & M. slip, 25,000 tons, net; Detroit, Grand Trunk tracks, 35,000 tons; Suspension bridge, International bridge or Port Dover, 430,000 tons, net.

A year ago charters of vessels to arrive at Duluth for wheat to be taken to Buffalo were made at rates as low as 2⅜ cents. Charters have been made during the past week at 3¼ cents, which is equal to $1.21, but at this writing 3 cents is all that is offered. In all about 2,000,000 bushels of wheat has been covered at Duluth to be taken by vessels to arrive after the opening of navigation.

Around the Lakes.

Capt Brittain of Saugatuck, Mich., will build a small wooden tug for the Muskegon Boom Co.

Capt. J. H. Killeran is now associated in business with Captains Alex Clark and J. B. Hall of Buffalo.

Capt. David Vance of Milwaukee will leave New York Saturday on his usual winter trip to England.

L. P. and J. A. Smith of Cleveland will build two steel scows, the dimensions of which are 150 by 30 by 12 feet.

United States Marshal Winney of Detroit has sold the wrecked steamer Britannic to Henry McMorran of Port Huron for $5,800.

Anyone knowing the address of W. E. Rice, formerly mate on a lake steamer, will confer a favor by sending the same to MARINE REVIEW

Thos. J. W. Quirk, who was very well known among lake engineers, died at his home in Cleveland, Sunday. He was sixty-three years of age.

David Bell, ship builder of Buffalo, has an order from Geo. Moon of the same place for a steel yacht 75 feet in length. The vessel is intended for Niagara river service and will be of very light draft.

Nau Bros. of Green Bay, Wis., have laid the keel for a tug to take the place of the Charnley, which they sold to Chicago parties. The new boat will be large and powerful and will be suited to wrecking work.

Captains Wm. Cumming, A. J. Greenley, Geo. Mallory, Henry Stone and James Stone, all representing mining and vessel-owning companies of Cleveland, will next week accompany the mayor and other citizens of Ashtabula on a trip to Washington in the interest of the proposed breakwater at that point.

Mr. Sinclair Stuart of the United States Standard Register of Shipping, New York, Capt. F. D. Herriman of the Bureau Veritas and John Haug of Philadelphia, are all engaged in overseeing, for insurance classification purposes, the work of constructing the Rockefeller ships in different lake yards.

T. R. Harvey of Harvey's Marine Bureau, Sault Ste. Marie, announces that the private telephone line between Sault Ste. Marie and Detour is to be greatly improved before the opening of navigation. Difficulties in the service between Detour and the Sault have occurred mainly on the short line through a swamp between Gatesville and Detour. This stretch of line, which is about ten miles long, will be abandoned and a new line, suited to telegraph and telephone, will be erected on a new country road.

According to articles of association filed at Lansing, Mich, by the Detroit River Bridge Co., the cost of the proposed bridge across the Detroit river is $4,000,000. Capital stock of the company is half that amount and the incorporators are the Michigan Central Railroad Co., which owns 19.930 shares of the stock; Chauncey M. Depew, Cornelius Vanderbilt, C. F. Cox of New York, and Henry M. Campbell, Henry B. Ledyard, Ashley Pond and Henry Russell of Detroit, each subscribing for ten shares.

Chief-of-Engineers Craighill of the war department announces that since the death of Major Post another engineer officer has been selected to succeed the late Gen. Poe, but his name will not be given out until spring. Gen. Craighill says the new man is engaged on important work elsewhere, and will not be at liberty to go to Detroit for six weeks or more. As it is impossible to do any out door work at present on the works which Gen. Poe had in charge, and as the services of his successor are not required immediately, it is thought best to not make his name public as yet.

Stocks of Grain at Lake Ports.

The following table, prepared from reports of the Chicago board of trade, shows the stocks of wheat and corn in store at the principal points of accumulation on the lakes on Jan. 25, 1896:

	Wheat, bushels.	Corn, bushels.
Chicago	20,980,000	3,568,000
Duluth	9,174,000	54,000
Milwaukee	429,000	1,000
Detroit	324,000	29,000
Toledo	813,000	472,000
Buffalo	2,738,000	108,000
Total	34,458,000	4,230,200

As compared with a week ago, the above figures show at the several points named an increase of 12,000 bushels of wheat and 1,483,000 bushels of corn.

On Jan 25, there was afloat at Chicago 1,618,000 bushels of corn and 227,000 bushels of oats; at Buffalo, 259,000 bushels of wheat, 223,000 bushels of oats and 304,000 bushels of barley; at Duluth, 512,000 bushels of wheat; and at Milwaukee 176,000 bushels of wheat and 120,000 bushels of oats.

Law Suit a Weapon.

(*From the New York Tribune*).

The Magnolia Metal Company, No. 74 Courtlandt street, has had to defend itself against several peculiar attacks by rival corporations, which have wanted to get control of its patents, and the latest attack is in the form of an attachment, which has been served in advance of the trial of a suit for $35,000. Charles B. and Edward C. Miller organized the company eight years ago, and the corporation is incorporated under the laws of West Virginia. As the company manufactures the finest grades of metal used in journal bearings, its patents are of great value and several capitalists have vainly tried to get control of them. Recently a discharged employe in Chicago made a claim against the company for $7,000, and the claim was assigned to James Shanks of this city, who brought a suit. The company settled the claim for $1 and caused the arrest of Shanks for alleged perjury in the proceedings. Now an attachment has been issued against the company in a suit brought by a man named Lawler, as the assignee of a claim of $35,000 made by an English construction company. As Lawler is a New-Yorker and brings the suit against a foreign company having an office in this city, he has been able to get the attachment before the trial of the suit. Although the suit is for $35,000, he has been obliged to give a bond for only $1,000, and ex-Dock Commissioner Phelan is on the bond.

Charles B. and Edward C. Miller said last evening that the English construction company, which had made the claim for $35,000, really owed them about $80,000, and they would be able to show that by the contract if the suit of the assignee could ever be brought to trial. The suit was an American suit, they declared, and had been brought in order to secure the attachment as a club to compel them to sell their patents cheaply. They declared that they would dispose of the suit in short order and show the animus of it when the case could be brought to trial. Instead of being liable to a judgment, they said, they had made about a million of dollars in the manufacture of magnolia metal and only lately passed $150,000 of the company's surplus to the capital account.

The Magnolia Metal Co. of New York has given bond for $36,000 in this matter, and has brought suit for $100,000 against the parties who instigated these attachment proceedings for money actually due from them to the Magnolia Metal Co. and for attempted damage by the attachment proceedings. A beautiful prospectus is being sent around to friends of this company offering stock with a 10 per cent. guaranteed dividend payable semi-annually.

Capital Involved in the Ore Business of the Lakes.

In July, 1892, the late Geo. H. Ely of Cleveland, who first enlisted capital in the Vermillion iron range of Minnesota, which is now controlled by the Minnesota Iron Co., one of the largest mining corporations in this country, prepared a statement showing the capitel invested in mining and transporting by rail and water to furnaces the iron ores of the Lake Superior region. Mr. Ely spent a large part of his time for several years previous to his death in the preparation of statistics relating to the iron mining business of Lake Superior and the commerce of the lakes. Since his death no effort has been made to supplement the statistics referred to by additions due to the development of the Mesabi range, the construction of new railways and docks in the Lake Superior region, building of new ships for the ore trade, etc. Before going to Washington, this week, however, Attorney Goulder of the Lake Carriers' Association concluded that these statistics might be brought up to date, and made available for arguments bearing upon legislation, by obtaining from ore dealers and vessel owners the best possible estimates of new investments in the various lines connected with the ore industry. After careful inquiry among ore dealers and reference to the Inland Lloyds Register and the files of the REVIEW for the value of ships built since July, 1892, it was found that investments in the various branches of the ore business now aggregate $233,242,085. The increase is mainly in the value of leases and fees on the Mesabi range, new ore railways in Minnesota and new docks at Duluth and Two Harbors. These figures seem enormous and can only be comprehended by those who have a knowledge of the capital required to mine and move to furnaces, in some cases more than a thousand miles distant, full 10,000,000 gross tons of ore in a single season of navigation, as was done in 1895. Or, the figures may be better comprehended by considering that 97,556,866 gross tons is the output of the mines since 1855 when the industry was begun. Mr. Ely's figures and the additions covering the period between July 1, 1892, and Jan. 1, 1896, are contained in the following table:

		Mr. Geo. H. Ely's figures, July 1, 1892.	Increase since July 1, 1892.
Capital in mines in the four Lake Superior districts in 1889, as per United States census	$54,825,122		
Increase to July 1, 1892	15,000,000	$69,825,122	$26,500,000
Capital in docks and their equipments at Lake Superior and Lake Michigan ports, built and used exclusively for shipping ore (official)		9,885,665	4,300,000
Capital employed exclusively in raiload transportation of ore from mines to shipping ports on Lake Superior and Lake Michigan (official)		27,014,594	5,350,000
Floating capital on the lakes, employed exclusively in ore transportation, from upper lake to lower lake ports (estimated)		29,933,107	16,747,100
Capital in docks, and in their equipments, for receiving and forwarding ore exclusively, at Lake Erie ports between Toledo and Buffalo, inclusive of both (official)		12,392,880	3,100,000
Capital employed exclusively in railroad transportation of ore, inland to mills and furnaces from Lake Erie ports (official)		26,343,617	1,850,000
Total		$175,394,985	$57,847,100
Increase, July 1, 1892, to Jan. 1, 1896		57,847,100	
Total, Jan. 1, 1896		$233,242,085	

Appointments of Masters and Engineers.

Mitchell & Co., Cleveland: Steamers—W. H. Gratwich (wood), Capt. Richard Jackson, Engineer Frank Parker; Robt. T. Fryer, Capt. Bernard D. Townsend, Engineer August Guy; John Mitchell, Capt. Wm. Cowen, Engineer John Leick; W. F. Sauber, Capt. Bernard Nelson, Engineer Peter Lavley; W. H. Gratwick (steel), Capt. Myron P. Parsons, Engineer Henry Graves; J. J. McWilliams, Capt. Christian Peterson, Engineer Wm. Fetting; Edward Smith, No. 1, Capt. C. D. Miller, Engineer Marshal Townsend; Edward Smith, No. 2, Capt. Hoyt Townsend, Engineer John Walderhouse; Lagonda, Capt. Charles B. Galton, Engineer Edward Guy. Schooners—S. E. Marvin, Capt. Wm. Brines; R. L. Fryer, Capt. Ely Jacques; C. J. Filmore, no appointment; Angus Smith, Capt. Owen Townsend; Maria Martin, Capt. Henry Elbe; Troy, Capt. H. C. Dean; Camden, Capt. John Van Ransellaer; Joseph Paige, Capt. Stephen Rose.

Wilson Transit Co., Cleveland: Steamers—W. D. Rees, Capt. A. M. Shepard, Engineer Fred Harmon; Yuma, Capt. Dan Buie, Eengineer John Skelly; Spokane, Capt. B. H. Jones, Engineer James Derig; Olympia, Capt. W. A. William, Engineer W.F. Gregory; Yakima, Capt. W.W. Dawley, Engineer James McGurk; Wallula, Capt. C. J. Holmes, Engineer Elmer Ellsworth; Sitka, Capt. C. A. Benham, Engineer John Howard; C. Tower, Capt. C. C. Tousley, Engineer Peter Lamare. Schooner—Yukon, Capt. William Forbes.

Lake Superior Iron Co., Cleveland: Steamers—La Salle, Capt. ——— Engineer Warren Tilton; Joliet, Capt. E. T Rattray, Engineer F. B. Smith; Griffin, Capt. O. W. Green, Engineer Geo. W. Mason; Wawatam, Capt. Edward Mooney, Engineer Edward Dempsey; Choctaw, Capt. John Ward, Engineer George Lynn; Andaste, Capt. William Ames, Engineer Frank Steadly.

Mutual Transportation Co., Cleveland: Steamers—New boat under construction in Cleveland, Capt. William Cumming, Engineer Andrew Haig; Cumbria, Capt. Martin Johnson, Engineer Grant Donaldson; Corsica, Capt. James A. Walsh, Engineer Clement Clark; Corona, Capt. Stephen Murphy, Engineer F. C. Stover.

Menominee Transit Co, Cleveland: Steamers—Saxon, Capt. Wm. C. Goodsell, Engineer Geo. Averill; German, Capt. Wm. Baxter, Engineer T. Kelley; Briton, Capt S. Stratton, Engineer Chas. J. Love; Grecian, Capt. A. C. Chapman, Engineer O. H. Gilmour; Roman, Capt. A. J. Greenley, Engineer S. A. Wells.

Moore, John W., Cleveland, O.: Steamers—J. W. Moore, Capt. Richard Neville, Engineer Walder; Louisiana, Capt. John Colter, Engineer Harry Stone; Marquette, Capt. Edward Chilson, Engineer Burrows; Colonial, Capt. J. H. Stover, Engineer George Masters; N. K. Fairbank, Capt. Truman Moore, Engineer T. Moore.

Republic Iron Co., Cleveland: Steamers—Republic, Capt. J. A. Landfair, Engineer Wm. Lowe; Specular, Capt. Chas. Hinslea, Engineer A. E. Bury; Continental, Capt. Wm. M. Megarvey, Engineer John Smith. Schooners—Magnetic, Capt. Harry Rodgers; Grace Holland, Capt. Wm. Black.

Mentor Steamship Co., Cleveland: Steamer—Geo. T. Hope, Capt. K. A. Jansen, Engineer Charles Gumlich. Schooner—J. C. Fitzpatrick, no appointment.

Pennington B. L., Cleveland: Steamer—C. B. Lockwood, Capt. R. Jollie, Engineer John B. Miller. Schooner—B. L. Pennington, Capt. E. M. Fuller.

Brown Steamship Co., Cleveland: Steamer—Castalia, Capt. C. C. Allen, Engineer Jas. Hay.

Capt. Campau, who sailed one of the Northern line passenger ships last season, will not be in the employ of the Northern steamship Co. this year. He will very probably sail the steamer Globe, unless that vessel is sold by the Globe Iron Works Co. It is understood that Capt. George A. Miner, last season in the W. H. Gilbert, will sail the Northern line passenger steamer North West. The steamer North Land will probably be sailed by Capt. Henry Stone of Cleveland, who has sailed the Lake Iron Superior Co.'s steamer La Salle for several seasons past.

Capt. D. P. Wright, last season in the steamer Pascal P. Pratt, will sail the steamer Alex. Nimick, and Capt. A. H. Reed of the Nimick will bring out the big steamer Queen City, now building at the yard of the Cleveland Ship Building Co. for A. B. Wolvin and others of Duluth.

Capt. Joseph A. Holmes, who has been in the Bradley employ for a great number of years, will next season sail one of the steamers owned by Capt. W. S. Mack of Cleveland.

Scotch vs. Belleville Boilers.

Editor MARINE REVIEW: My communication in your issue of Jan. 9 can not be altered in any particular. The facts are as I have stated, that investigations of applications of Belleville boilers, including the Tamise, have been carefully made by the engineer corps of the royal navy. The Sharpshooter (4,000 H. P.) has been under practical tests for about three years; by this I mean tests at sea on prolonged voyages, in all weathers and conditions of sea. Four or more boilers have also been detached from the groups to be placed in one of the 25,000-horse-power cruisers, and subjected to repeated tests. As a result it has been decided to place over 100,000 horse power in the eight cruisers now under construction, in addition to the 54,000 horse power already placed.

In other words, the royal navy engineers have by thorough and practical experience with Belleville boilers at work on the Sharpshooter adopted them upon the essential requirements for all naval vessels—least weight and space with greatest efficiency; and also they have proved conclusively another essential—greatest durability. As a further result, Messrs. Maudslay, Son & Field are building on merchant and navy orders over 50,000 horse power at this writing in their Greenwich boiler works.

M. CORVELI,

New York, N. Y., Jan. 29, 1895.

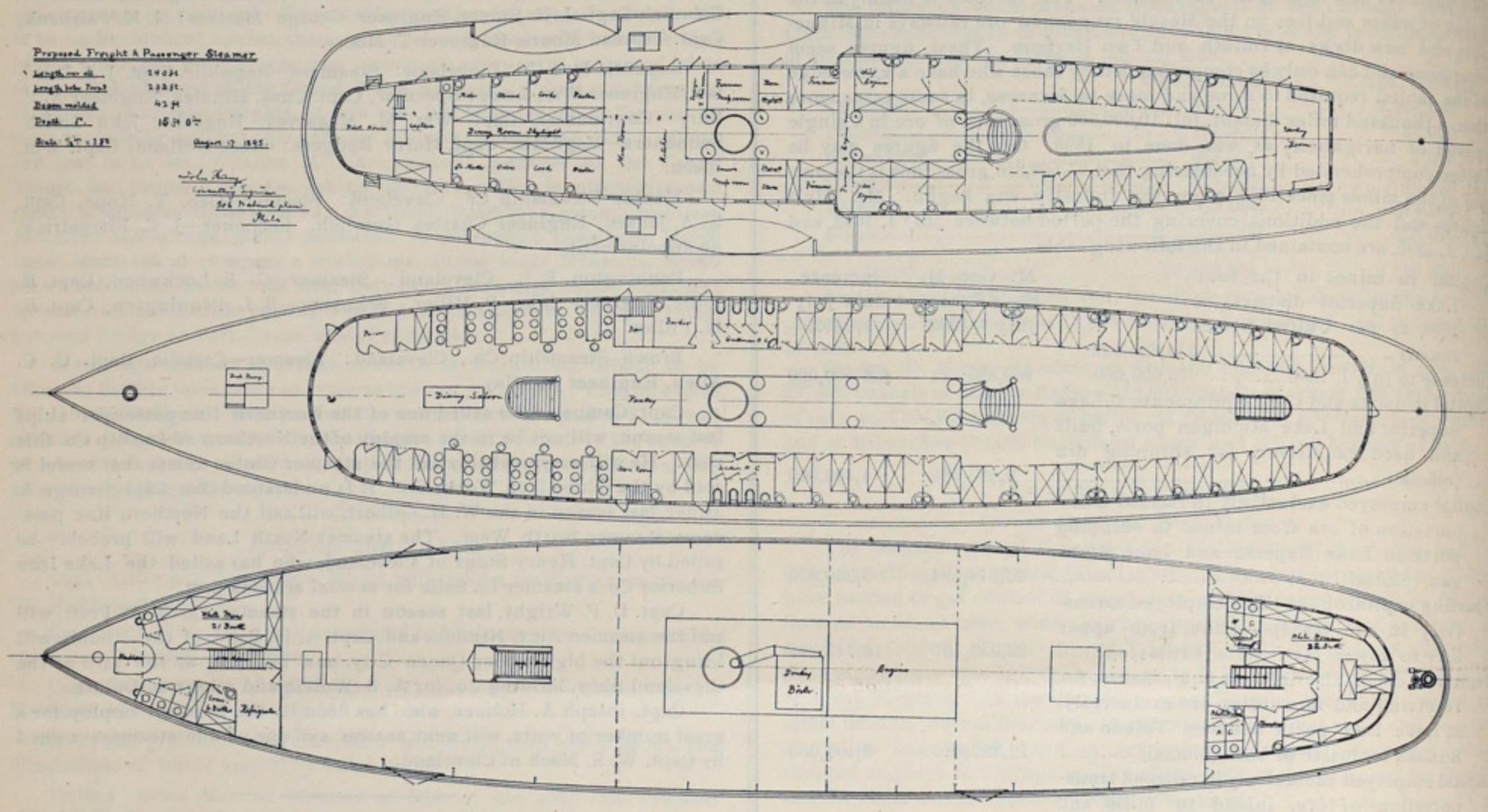
A mate who is to be with Capt. Wm. Cumming in the new Mutual line steamer, which is 432 feet over all, took a look over the ship's deck at the Globe ship yard, a few days ago, and announced to his companions that he would begin bicycle lessons immediately.

A Steamer that is Being Built by the Cramps.

There is presented on this page plans showing the arrangement of passenger accommodations in a freight and passenger steamer that is being constructed by the Wm. Cramp & Sons Ship & Engine Building Co., Philadelphia, for service between Baltimore and Norfolk. The vessel was designed by John Haug of No. 206 Walnut Place, Philadelphia, and is being built under his supervision. Mr. Haug was recently selected to supervise the construction of the two steamers which the Globe Iron Works Co., Cleveland, is building for Mr. John D. Rockefeller. He is quite well known on the lakes.

The Cramps guarantee a continuous speed of 15 knots for the vessel illustrated herewith. She will be operated in connection with the Southern Railway Co. by a company of which Reuben Foster of Baltimore is manager. Her dimensions are 240 feet over all, 232 feet between perpendiculars, 42 feet moulded beam and 15 feet moulded depth. The general arrangement of the ship is plainly shown on the plans, the cargo spaces being below main deck and between decks, the latter being accessible through two large ports, 8 feet square, on each side. Passenger accommodations are above the saloon deck. They include staterooms, all outside, for 100 passengers, in addition to lavatories, toilet rooms, etc.

All parts of the ship to be used by passengers are separated from cargo spaces by iron partitions, making them secure against fire and also excluding odors, dust, etc. Machinery enclosures are of iron to top of deck houses. The engine is of triple expansion type with cylinders 24, 38 and 62 inches diameter and 36 inches stroke. All the main shafting is of steel and the propeller of manganese bronze. Feed pumps and circulating pump are independent. There are four steel boilers, 12 feet diameter and 12 feet long, designed for 160 pounds working pressure and each having two corrugated furnaces, the total grate surface being 200 square feet and the heating surface about 6,000 square feet. The equipment includes Providence steam windlass and capstan, a Williamson steam steering engine and a complete electric light outfit, as well as a search light of 2,000 candle power.



PLANS SHOWING PASSENGER ACCOMMODATIONS OF SOUTHERN RAILWAY CO.'S NEW STEAMER.

Compliments for the Review.

The Lake Carriers' Association again entrusted to the MARINE REVIEW this year the work of printing the annual report of the board of managers of the association, and on account of the very full report of the Detroit meeting printed in our issue of Jan 16, the executive officers of the association purchased a large number of copies of the paper and dispensed with the matter of publishing a general account of the proceedings. It is at all times encouraging to have careful work of this kind endorsed by those who are most interested in it. A few days ago we received the following note from H. E. Schmuck of Springfield, Mass., who is interested in lake vessels:

"I received this morning my copy of the REVIEW for the current week with one corner badly torn and I must ask you to send me another copy, as I have the papers bound every year. I wish to express my thanks for the complete report contained in this number of the annual meeting of the Lake Carriers' Association, a matter in which I am deeply interested, but at present my business is such in the month of January as to make it utterly impossible for me to be there in person, although I was present in spirit."

Wm. A. Fairburn, naval architect employed with the Bath Iron Works, Bath, Me., who is one of the most careful readers of marine journals in this country writes us as follows: "I am very much pleased with your paper, and the great progress you make year by year, and without doubt I can say that the MARINE REVIEW is the best published American marine paper. The best feature of all is the broadness of its news and its unprejudiced bearing on all matters."

Rules for Navigation of Hay Lake and Other Channels.

The United States senate on Tuesday last passed a bill (S 565) which will give to the secretary of war power to prescribe rules for the navigation of the St. Mary's Falls canal, just as he now exercises jurisdiction over the St. Clair Flats canal. The bill in fact authorizes the secretary of war to prescribe rules and regulations for the government and navigation of any or all canals and similar works of navigation that now are or hereafter may be owned, operated or maintained by the United States. Severe penalties are provided for the willful violation of such regulations as the secretary of war may provide for the use of the canals. It is more than probable that this bill will pass the house without great delay, so that next season government rules will undoubtedly be provided not only for the Sault canal but also for Hay lake channel and for other parts of the 20-foot channel.

In this connection it may be noted that both vessel owners and vessel masters, at meetings held recently, petitioned the treasury department to provide rules for the navigation of the entire Sault river. The object in petitioning the treasury department in this matter was to secure, if possible, the assistance of the revenue cutter service, which is a part of the treasury department, in providing a patrol for the river. If rules are provided by the war department for Hay Lake channel a part of the present difficulty will be overcome, but there are, of course, parts of the river other than Hay Lake channel in which the navigation of vessels should be regulated by stringent rules. Mr. Burton of Cleveland introduced in the house, a few days ago, a bill to regulate the navigation of the Sault river, and Capt. William Mack, with other members of the Ship Masters' Association, appeared before the commerce committee of the house in support of the measure.

G. G. Hadley, Jr., and J. P. Nagle of Toledo, who formed the acquaintance of a large number of vessel owners at the Lake Carriers' meetiug in Detroit, will conduct a vessel agency at Toledo as well as a tug line. They have purchased the tug Wisconsin and have another tug in view.

The Engineers' Bill.

Editor MARINE REVIEW: In your issue of Jan. 2, page 7, in the matter of the bill of Senator W. C. Squires in behalf of marine engineers you say: "It is to be feared, however, that the engineers have attached some provisions to their bill that may delay or probably hinder altogether the passage of the measure." As all marine engineers are anxious to have this bill pass, we would thank you to name the provisions referred to. Will you kindly favor us, and oblige,

GEO. P. WILSON, Corresponding Secretary, M. E. B. A., No. 13.
Philadelphia, Pa., Jan. 7, 1895.

The writer of the above communication is well known to marine engineers throughout this country. He has been a national officer of the organization and is prominent in the Philadelphia association. His request to be informed regarding provisions in the engineers' bill which it is thought will delay passage of the measure is undoubtedly made in good faith, and the REVIEW will endeavor to answer him without any thought of hindering the passage of the bill, as we are firmly of the opinion that engineers of vessels of the United States should be classed as officers and should be in all cases citizens of the United States. Provisions of the bill aside from those relating to citizenship and the word "officers" are not objectionable any more than the more important features. We have simply said that they may delay action on the measure or probably prevent its passage altogether.

Take, for instance, this feature of the bill: "No license shall be suspended or revoked except upon charges duly preferred in writing, verified and acknowledged before an officer authorized to administer an oath, and *sustained by the supervising inspector-general* after an investigation of the charges, in which the accused shall be allowed counsel, and may testify in his own behalf; and in no case shall the accused be deprived of his license until a charge of incompetency or unfitness against him shall be *sustained by the supervising inspector general.*" This provision in the bill would transfer to the supervising inspector-general the duty of reviewing all cases bearing upon the revocation of licenses. At present trials are conducted by local inspectors and the accused has the right to appeal to the supervising inspectors. The engineers propose that the supervising inspector-general sustain or turn down the local inspectors in their decisions; in other words they propose to attach additional work and responsibility to the office of the chief of the service. Now we do not claim to speak for Gen. Dumont in this matter, but it is well known that he has been seeking additional help in his office, and for this and other reasons we will be very much surprised if he gives earnest support to this change. He is to remain in office for some time to come and it would seem injudicious in the engineers to oppose him. The inspection officials as a whole will certainly not favor this provision of the bill. Would it not be better for the engineers to have the assistance of even a part, if not all, of the officials of the inspection service in trying to accomplish the main objects in their bill—American citizenship and a favorable definition of the term "officers"?

Another clause in the bill provides that "the examination of an applicant for license of a higher grade shall take place within ten days after such time as the applicant may request." Now it is quite possible that engineers have been annoyed by being compelled to make several visits to the office of some local inspector before they managed to obtain a hearing when seeking an increase in grade of license, but this is a small matter compared with the first clause in the bill. Then why make an arbitrary limit of ten days? Local inspectors may claim that they are often long enough away from their offices on the work of inspecting vessels to make it impossible to comply with this ten-day rule, and if they so complain to the treasury department objection to this one clause may keep the bill in committee or cause it to be otherwise tied up until more pressing matters are demanding the attention of congress. Eliminate small matters from the bill and let the effort of all the engineers be on a satisfactory definition of the term officers and a plain clause providing for the employment of Americans only as engineers.

Not "Onto His Job."

Editor MARINE REVIEW: I wish to call your attention to a very erroneous statement which appeared in this week's issue of the Railroad Gazette. In an item referring to the annual meeting of the Lake Carriers' Association, they make the extraordinary statement that the number of tons of freight carried by vessels of the association the past year was over 617,000. You see they got the tonnage of the association mixed with the amount of freight moved, which would be nearer 30,000,000 tons. This paper has within a year or so gone to reporting lake news and I think their reporter is not "onto his job," as this is not the first mistake, and they are very misleading to people who read the items and are not acquainted with the facts in the case.

H. E. SCHMUCK,
Springfield, Mass., Jan. 25, 1896.

The Clyde Product and the Lake Fleet.

Editor MARINE REVIEW: We have had some little discussion here regarding an item that appeared in certain papers a week or two ago, in which it was stated that the tonnage turned out on the Clyde during 1895 exceeded the combined tonnage owned on the great lakes. Is this statement not wrong, and have you any accurate figures on the subject?

M. SANFORD RICE.
No. 5 Walnut street, Ashtabula, O.

The statement is, of course, incorrect. It is true that ship building on the Clyde and throughout the British isles is an immense industry, and its greatness is clearly shown when questions of this kind are brought up; but it is also true that the tonnage owned on the lakes is far in excess of the Clyde production for any year and is considerable larger than the new tonnage of the United Kingdom for 1895.

The latest report of the United States commissioner of navigation shows that there was owned on the lakes on June 30, 1894, 3,342 vessels of 1,241,459 gross tons. Of these, 1,755 were steam vessels of 857,735 tons, 1,100 were sail vessels of 300,642 tons and 487 were unrigged crafts of 83,082 tons.

Compared with the foregoing it is found that Lloyd's Register (British) in its summary of ship building for 1895, just issued, states that, exclusive of warships, 579 vessels of 950,967 tons gross (viz, 526 steamers of 904,991 tons, and 53 sailing vessels of 45,976 tons) were launched in the United Kingdom. The war ships launched at both government and private yards amounted to fifty-nine of the 148,111 tons displacement. The total output of the United Kingdom for the year was, therefore, 638 vessels of 1,099,078 tons. The output of 1895 in the United Kingdom was less than that of 1894 by over 95,000 tons, but the proportion of steam tonnage to the total tonnage launched was much higher. The total product of the Clyde in 1895, war ships included, was 359,625 tons, while that of the Tyne was 173,733 tons, the Wear 125,910 tons, the Tees 117,333 tons, Belfast and Londonderry 102,067 tons, West Hartlepool 90,689 tons and other districts smaller amounts. About 20 per cent. of the tonnage built in the United Kingdom during 1895 was to the order of foreign and colonial ship owners.

We are inclined to think that we are doing great things on the lakes—in having under contract as at present about $8,500,000 worth of new vessel property—but the foregoing statements show that the tonnage of 638 vessels launched in different parts of the British isles during 1895 was not far from the aggregate tonnage of all vessels owned on the lakes in June last.

Freights in Sixty-Six.

Editor MARINE REVIEW: The spurt of advance in freights last year seems to have been overrated by the "kids" in the vessel business who thought, judging from the remarks of some of them, that freights have climbed to an unprecedented altitude.

Although the 6-cent grain freight and $2 ore freight from Duluth was very acceptable, and was a liberal advance over recent years, it will size up very low in comparison with freights in 1866 and some other later periods. Some of the charters then made, I recall and were as follows:

Schooner Mediterranean, wheat, Chicago to Ogdensburg, 38 cents per bushel.

Schooner Africa, wheat, Milwaukee to Ogdensburg, 34 cents, per bushel.

Steamer D. W. Powers, ore, Marquette to Cleveland, $6.40 per ton.

Brig Geo. M. Abell, coal, Cleveland, to Ogdensburg, $6 per ton.

Doubtless some of the older brokers and vessel owners can recall examples of as high or even higher rates than the foregoing.

B. L. PENNINGTON,
Cleveland, Jan. 24, 1896.

[The REVIEW will be pleased to receive from the older vessel men reminiscences along the line suggested by the foregoing letter.—ED.]

No Cause for Resolutions.

Editor MARINE REVIEW: I notice in your issue of this week that the ship masters at their annual meeting passed a resolution opposing any change in the navigation laws on the lakes, and stating that this was prompted by a bill proposed by Representative Payne. These gentlemen were entirely mistaken, as Mr. Payne's measure does not affect the great lakes, operating under the White act of last year, which it does not in any way amend. I should be pleased if you would, through your valuable columns, remove this misapprehension.

EUGENE T. CHAMBERLAIN,
Commissioner of Navigation,
Treasury Department.
Washington, D. C., Jan. 25, 1896.

"ROPER'S LAND AND MARINE ENGINES," BOUND IN MOROCCO WITH FLAP AND POCKET, WILL BE MAILED TO ANY ADDRESS FOR $3.50 SENT TO THE MARINE REVIEW, CLEVELAND, O.

MARINE REVIEW

DEVOTED TO THE LAKE MARINE AND KINDRED INTERESTS.

Published every Thursday at No. 516 Perry-Payne building, Cleveland, O

SUBSCRIPTION—$2.00 per year in advance. Single copies 10 cents each. Convenient binders sent, post paid, 75 cents. Advertising rates on application.

The books of the United States treasury department on June 30, 1895, contained the names of 3,342 vessels, of 1,241,459.14 gross tons register in the lake trade. The number of steam vessels of 1,000 gross tons, and over that amount, on the lakes on June 30, 1894, was 359 and their aggregate gross tonnage 634,467.84; the number of vessels of this class owned in all other parts of the country on the same date was 316 and their tonnage 642,-642.50, so that half of the best steamships in all the United States are owned on the lakes. The classification of the entire lake fleet on June 30, 1895, was as follows:

Class.	Number.	Gross Tonnage.
Steam vessels	1,755	857,735.00
Sailing vessels	1,100	300,642.00
Unrigged	487	83,082.00
Total	3,342	1,241,459.00

The gross registered tonnage of vessels built on the lakes during the past five years, according to the reports of the United States commissioner of navigation, is as follows:

		Number.	Net Tonnage.
Year ending June 30,	1891	204	111,856.45
" " "	1892	169	45,168.98
" " "	1893	175	99,271.24
" " "	1894	106	41,984.61
" " "	1895	93	36,353.00
Total		747	334,634.28

ST. MARY'S FALLS AND SUEZ CANAL TRAFFIC.

(From Official Reports of Canal Officers.)

	St. Mary's Falls Canal.			Suez Canal.		
	1894.	1893.	1892.	1894.	1893.	1892.
No. vessel pass'ges	14,491	12,008	12,580	3,352	3,341	3,559
T'n'ge, net registd	13,110,366	9,849,754	10,647,203	8,039,106	7,659,068	7,712,028
Days of Navigat'n	234	219	223	365	365	365

Entered at Cleveland Post Office as Second-class Mail Matter.

IF DIRECT pleading before congressional committees is to count in legislative matters, such as the Detroit river bridge, regulation of raft towing, new aids to navigation, etc., the vessel owners of the lakes propose that congressmen shall be fully informed on these subjects. A large representation from the Lake Carriers' Association and a delegation of business men from Cleveland will be heard before committees on Thursday and Friday of this week. The meetings were arranged by Mr. Burton of Cleveland and will undoubtedly prove advantageous. Among vessel owners now in Washington are the following: Ex-President Wm. Livingstone of the Lake Carriers' Association, Detroit; President J. J. H. Brown and Secretary C. H. Keep of the Lake Carriers' Association, Buffalo; J. S. Dunham, Chicago; Harvey D. Goulder, Geo. P. McKay, Wm. S. Mack, C. E. Benham, Samuel Mather and James H. Hoyt. Messrs. Mather and Hoyt are in Washington on special matters pertaining to a new Cleveland post office and to Cleveland harbor improvements, but they will of course assist the members of the Lake Carriers' Association. Other Cleveland gentlemen who are seeking a favorable appropriation for the city's harbor are Mayor McKisson, President Wilson M. Day of the chamber of commerce and Messrs. A. T. Anderson and L. E. Holden.

IT is certainly surprising to find admirals and retired admirals of our navy, as well as others who ought to know better, writing about the fleet of gunboats and other war vessels that England could send to the lakes, and assuming all the time that vessels that are within the dimensions of Welland canal locks could all be floated through from the Atlantic coast. Everybody who has any knowledge of the St. Lawrence river and its canals knows, of course, that this assumption is absurd, as the dominion government has been for years working on the improvement of the St. Lawrence canals, so as to provide 14 feet navigation, similar to the Welland, but millions must yet be spent on this undertaking.

IT WOULD seem that the sentiment in congress is entirely in favor of making appropriations for two new revenue cutters for the lakes, to cost $200,000 each, in addition to the ship now under construction in Cleveland. The report of the senate committee on commerce is the strongest kind of an indorsement for the measure carrying these appropriations, but congressmen from the Pacific and gulf coasts, as well as New York, are also demanding appropriations for vessels of this kind and the leaders in both houses are determined to hold down expenditures.

THE REAPPOINTMENT by the president of Commodore Geo. W. Melville to be engineer-in-chief of the navy, and confirmation of the same by the senate, is generally regarded as a special compliment to the extraordinary professional ability of this officer. Commodore Melville has been for nine years at the head of the bureau of steam engineering, and the present is his fourth successive term in that office.

RESOLUTIONS calling for an investigation of the scheme to regulate lake levels by means of dams are meeting with favorable action at every turn in congress. The latest favorable report is from the river and harbor committee of the house, which recommends unanimously the passage of Representative Griswold's measure on this subject.

Ship Masters' Annual Meeting.

The last issue of the REVIEW contained reference to the several resolutions on raft towing, Detroit river bridge, regulation of Sault river commerce, etc., which were adopted by the grand lodge of the Ship Masters at the annual meeting in Washington. The routine business of the organization took up a great deal of time but there were no special matters of importance pertaining to the beneficial features of the association. Officers elected for the ensuing year are: Capt. George McCullagh of Detroit, grand president; W. S. Mack of Cleveland, first grand vice-president; W. E. Rice of Port Huron, second grand vice-president; W. A. Collier of Cleveland, grand secretary; Lyman F. Hunt of Buffalo, grand treasurer.

The grand lodge called in a body on President Cleveland, Secretary Carlisle, the supervising inspectors of steam vessels, Mr. E. T. Chamberlain, commissioner of navigation, Chief Moore of the weather bureau, Commander Sigsbee of the hydrographic office and were entertained at a banquet by the American Pilot's Association. Following is the representation of the different lodges: Buffalo, F. D. Welcome and Capt. McCabe; Port Huron, W. E. Rice; Chicago, Robt. Young and H. F. Loftus; Cleveland, W. S. Mack and J. A. Holmes; Bay City, C. T. Brown; Milwaukee, C. M. Davis and Henry Leisk; Detroit, A. J. McKay and C. L. Wilson; Marine City, J. A. Ward and Geo. A. Shaw; Toledo, Duncan Stalker and Henry Root. There were present in addition to those just named the officers of the organization, noted above, as well as grand Past-President Clark and Capt. C. E. Benham who is now a past president with Capt. Clark. Wives of four officers were in the party as were also Thomas Jones, Robert Cowley, Capt. Wilford and John Leonard.

Homer J. Carr of the Lake Marine News Association, who is working on a system of making direct telegraphic reports next season to vessel owners, underwriters and others regarding accidents, vessels in shelter, etc., writes the REVIEW that arrangements are being completed to cover vessels sheltered at Whitefish point during northwesters. "I am unable," he says, "to get any response from the Western Union Telegraph Co. as to its course toward building a line to Detour. The matter seems to have become tangled up in the ponderous machinery of that company, and all I can learn is that it is being considered. If the company should decide to build a line into Detour, we will, of course, take all possible advantage of the telegraph office there to improve our service."

A recent volume of the "Official Records of the Union and Confederate Navies in the War of the Rebellion" has been received from the navy department. It is, like the first volume, a book of some 900 pages with full-page engravings of many of the ships whose operations are recounted. This work is published by the superintendent of naval war records, under the direction of the secretary of the navy. Included in this second volume is the story of Capt. Semmes of the Alabama and a transcript of his private log and personal comments.

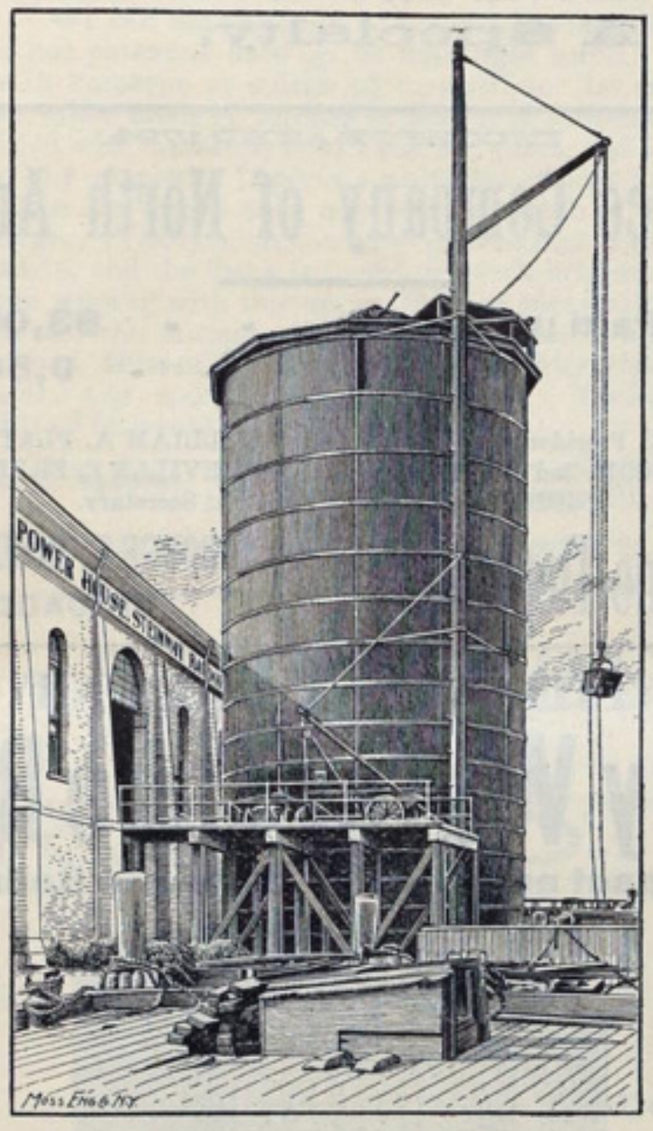
The International Correspondence School, Scranton, Pa., which is one of the best institutions of its kind in this country, has begun the publication of a paper entitled "Home Study." It is an elementary monthly journal for students of the industrial sciences and readers of the technical press who need a better knowledge of arithmetic, geometry, trigonometry and the principles of physics and drawing to enable them to derive the best results from their reading.

Wm. H. Webb, the founder of Webbs' Academy and Home for Ship Builders', Fordham Height, N. Y., is getting out a work on "American Ship Building."

CAPTAINS AND MATES ARE INVITED TO CALL AT THE OFFICE OF THE MARINE REVIEW AND LOOK OVER THE CHARTS AND SAILING DIRECTIONS OF LAKES SUPERIOR, MICHIGAN, HURON, ERIE AND ONTARIO, PUBLISHED BY THE HYDROGRAPHIC OFFICE.

Device for Storing Coal.

A novel device for storing coal is illustrated in the accompanying engraving. Some manufactnrers and managers of power plants are very firmly of the opinion that on account of the danger of strikes in coal producing districts, delays in transportation incident to strikes, etc., no establishment requiring large quantities of fuel should be without a liberal supply of the same to provide against such contingencies. Very often difficulty is found in providing a proper bin or pocket for storing coal, especially where ground or floor space is limited. The pocket illustrated herewith was designed by the Berlin Iron Bridge Co. of East Berlin, Conn., for the Steinway Electric Railroad Co., Astoria. Especial attention is directed to the cylindrical form of construction. This



pocket is 28 feet in diameter and 54 feet high, and has capacity for 1,000 tons of coal. The coal is unloaded from cars or carts, at the side of the pocket in the ordinary way, and hoisted by means of a bucket to the top of the pocket, an ordinary hoisting engine being used for this purpose. Of course, more expensive mechanical appliances might be introduced for doing this work, such as an endless chain or some other apparatus of a similar nature, but the method shown in the engraving is thought to meet requirements. There is an opening in the side of the pocket near the base, for removing the coal in the ordinary way, so that it can be carried into the boiler room by means of an endless chain, with buckets, or by hand, or by carts, or in whatever other manner desired. The advantage of this pocket does not lie in its presenting any additional facilities for handling the coal, but more in its being an economical method of storing coal. It admits of great capacity in proportion to the floor surface. The patents on this construction are owned and controlled by the Berlin company.

Comments on the Dunn Stockless Anchor.

Until a device of any kind is generally adopted there are always numerous questions arising regarding it. Although in use on the two largest and other lake steamers, this is true of the Dunn stockless anchor. The opinion of Capt. Mallory of the Minnesota Steamship Co., as to the grappling and holding qualities of this anchor, is therefore valuable. He writes as follows:

Office of PICKANDS, MATHER & Co.
CLEVELAND, O., Jan. 22, 1896.

Editor MARINE REVIEW, Dear Sir:—Replying to yours of the 6th, I used the Dunn anchor three or four times last fall and found it a good holding anchor and one that took hold quickly. I never had any trouble with its fouling, and have never had any experience with any other make of stockless anchor. Yours respectfully,

G. B. MALLORY.

Capt. Mallory's experience with this anchor was in the steel steamer Victory, the largest vessel on the lakes last year. In an interview with him, he said that this anchor required no larger hawse-pipe than other stockless anchors, as the shackle could be changed to an elongated shape instead of a circular shackle.

The following is from the commander of the U. S. S. Baltimore:

AMERICAN STEEL CASTINGS Co., Thurlow, Pa.:—I was executive officer of the U. S. S. Baltimore from the time she first went into commission Jan. 7, 1890, until March 22, 1892. The vessel was supplied with two bower anchors of the Dunn type, and two sheet anchors of the old-fashioned kind with iron stocks. During the time I was on board, the Dunn anchors alone were used for anchoring the vessel, as it was never thought necessary to let go a sheet anchor. After the first two or three months there was never any uneasiness about the anchor not holding; we knew it would hold. The vessel anchored in all depths of water, from 23 feet at Montevideo to 40 fathoms at Valparaiso. To the best of my knowledge both flukes never failed to take the ground.

During the whole time the anchor never dragged but once, and that was while anchored at Lisbon, Portugal, in 18 or 20 fathoms of water, with 45 fathoms of chain, with six to ten coal lighters alongside and a tidal current of from 3 to 5 knots. At that time the anchor dragged slowly, but so slowly that it was certain that both flukes were deep in the mud. At Valparaiso two or three times, during moderate northers, while anchored in 40 fathoms of water with 100 fathoms of chain, the vessel rode to one anchor without dragging, while other vessels had two anchors down and many of them dragged. The Dunn anchor never fouled, so that when getting under way it was not necessary for the officer of the forecastle to report, "Clear anchor, sir." It is for security, strength, holding power, security from fouling, ease in handling, stowage and in general good qualities, by far the best anchor I ever saw, and were I ordered to command a vessel I should apply for anchors of the Dunn type.

Respectfully,
U. SEBREE, Lieut. Comdr., U. S. Navy,
Late Executive Officer of U. S. S. Baltimore.

Further particulsrs may be obtained from the American Steel Castings Co., Thurlow, Pa.

A Cleveland Branch.

The following comes to us from the H. W. Johns Mfg. Co., New York, manufacturers of pipe and boiler coverings, etc.: "In order to accomodate our customers in Ohio, we have opened an office at No. 32 S. Water street, Cleveland, where we are represented by G. R. Herrick and Mr. J. C. Jenkins, who will give prompt and personal attention to all orders sent to our Cleveland address. This arrangement will enable us to make prompt delivery of all orders, and to execute contracts for the application of our pipe and boiler coverings without delay. An assorted stock of our electrical insulating goods, also abestos non-conducting coverings, roofing, and fire-proof construction materials, steam packing, liquid paints, etc. will be carried."

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I. W. NICHOLAS, DUPLICATE OF THE CHILI,
TEN DETROIT-BUILT STEAMERS. GROUPED,
THE NORTH LAND—EVENING SCENE,
THE W. H. GRATWICK—HEAVY WEATHER COMING.

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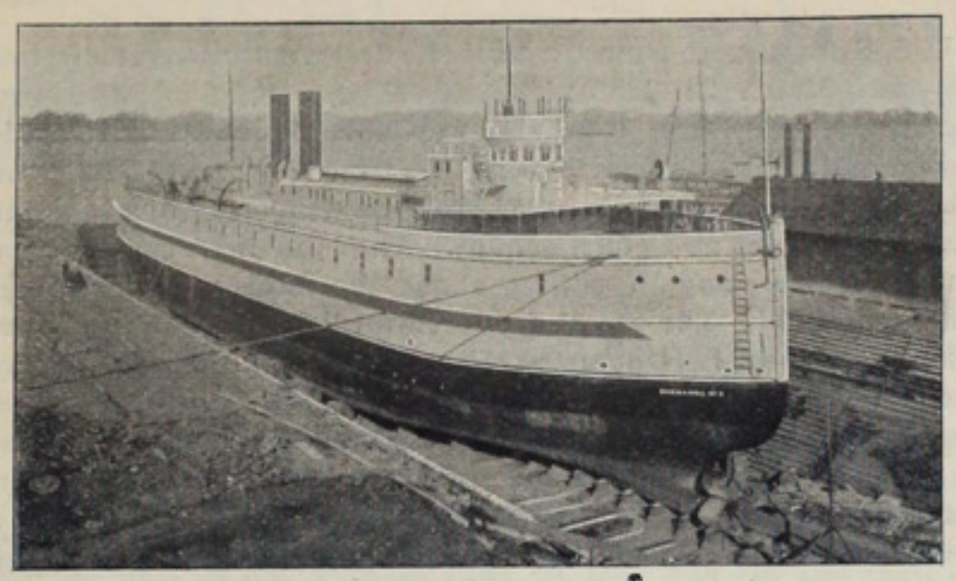

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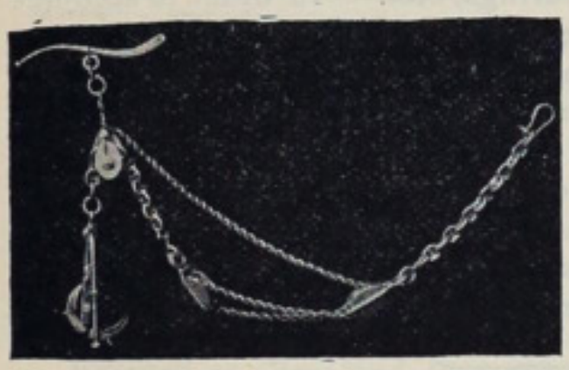
Lake Marine Department.

GEORGE L. McCURDY, Manager
CHICAGO, ILLS.



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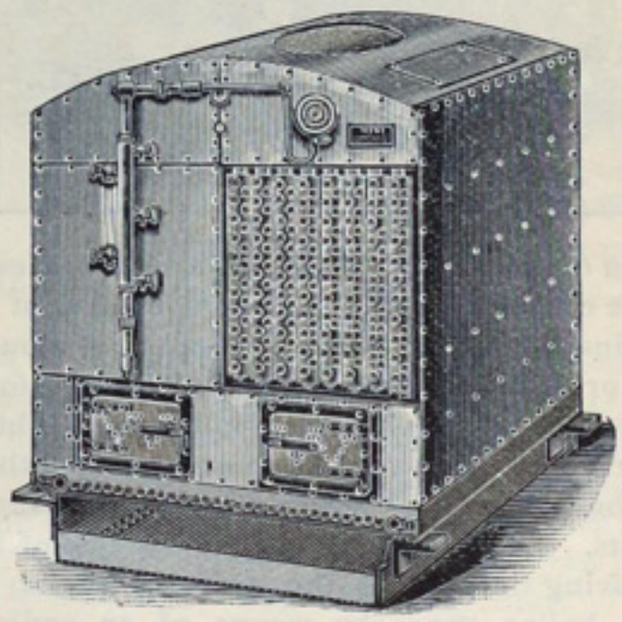

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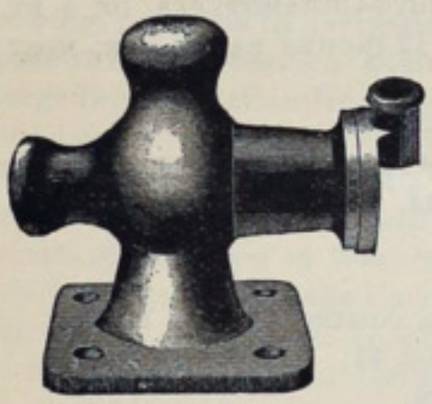

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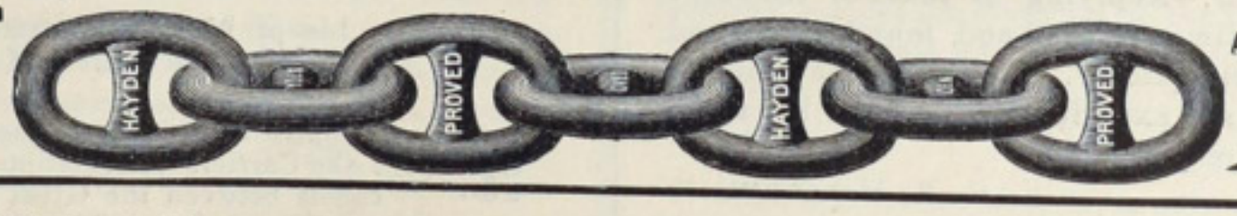

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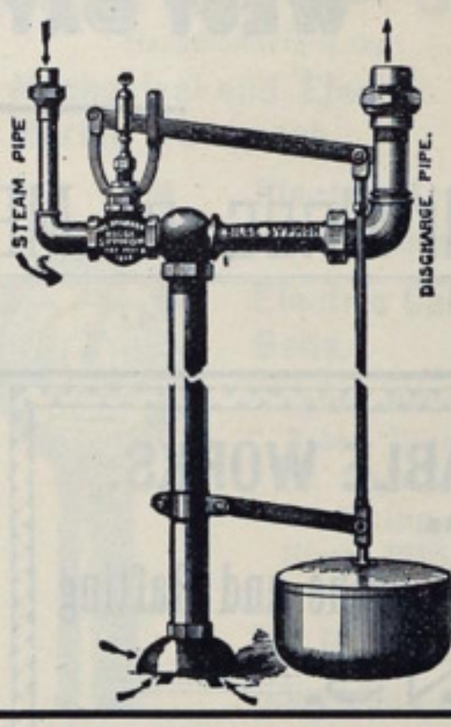

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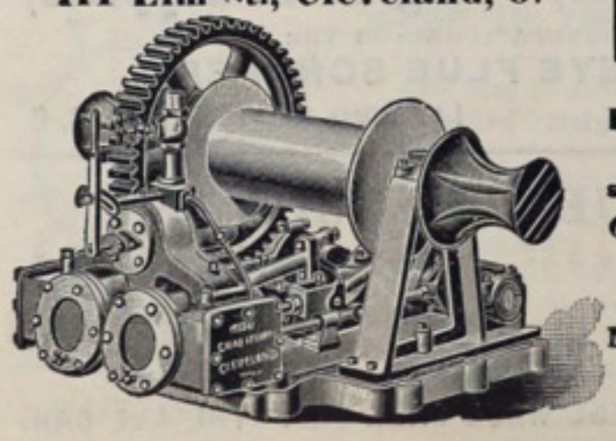

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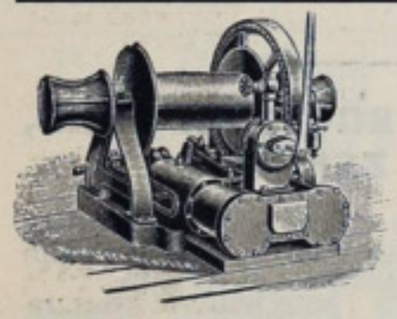

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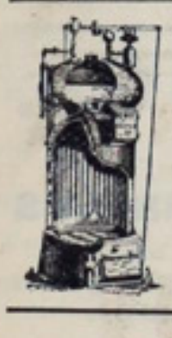

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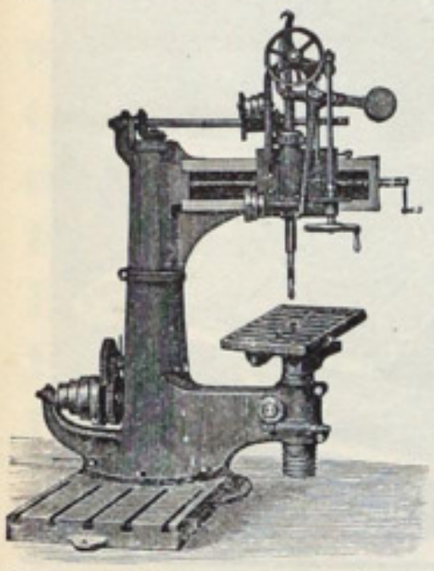

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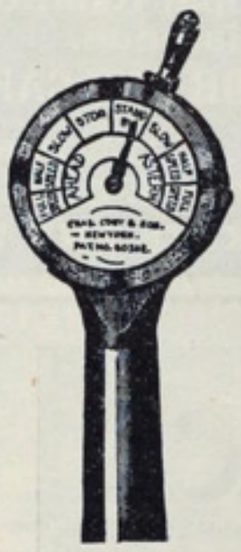

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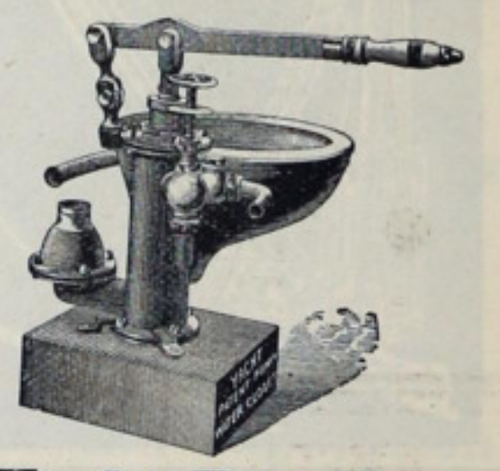

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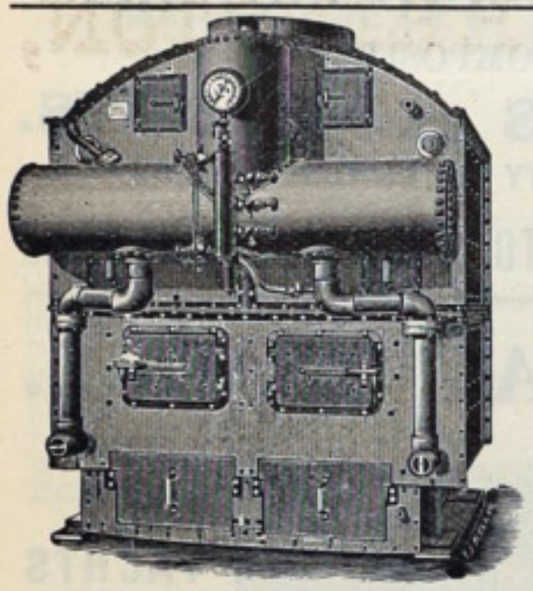

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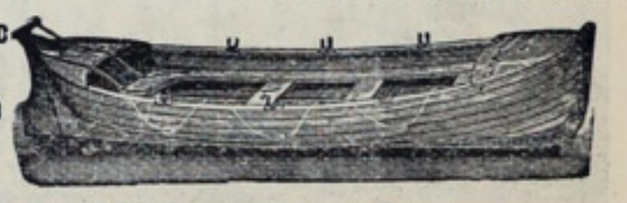

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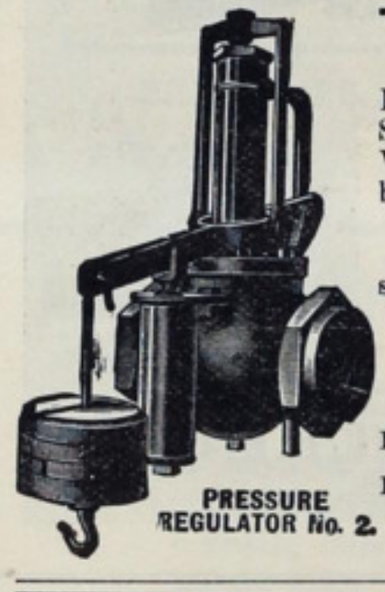

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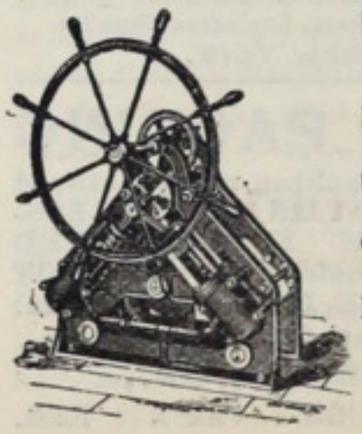

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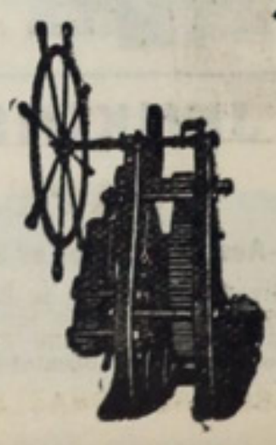

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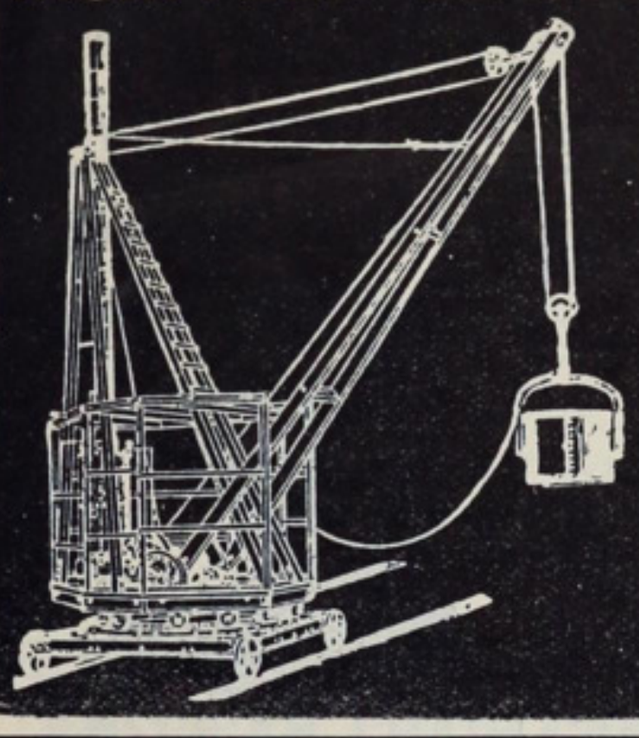

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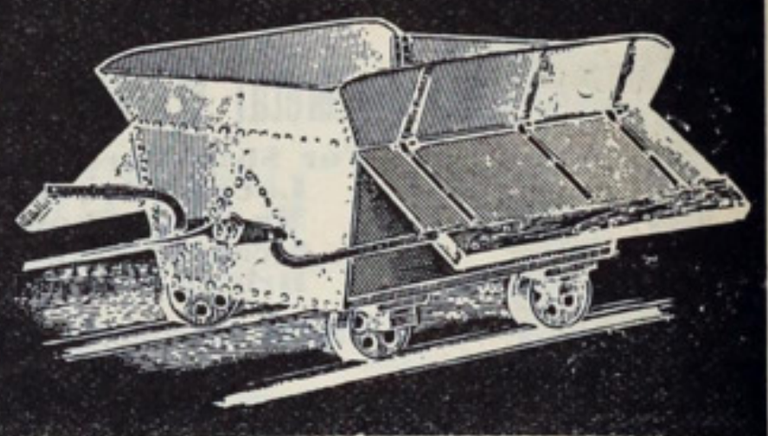

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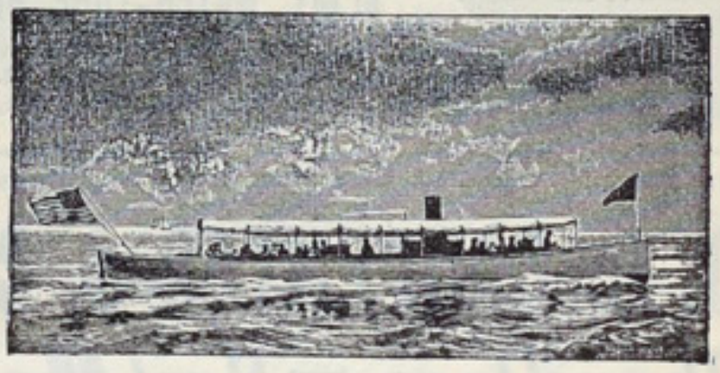

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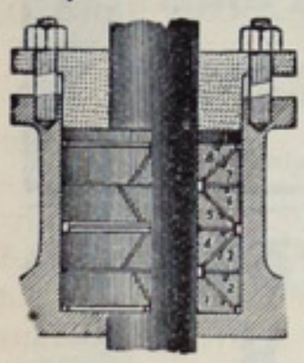

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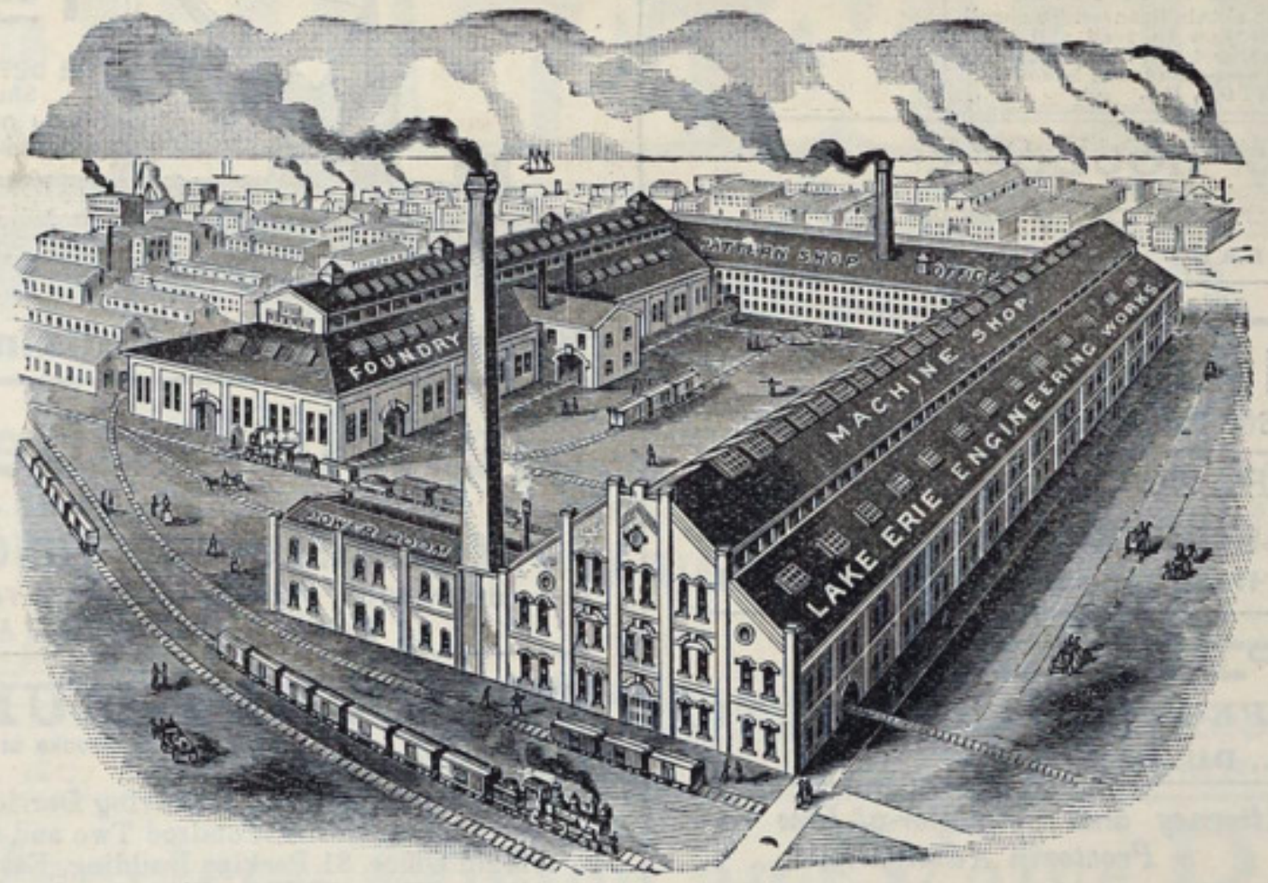

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		Feet.	*Feet.*	*Feet.*	*Feet.*	*Feet*	
Buffalo, N. Y.	Union Dry Dock Co.	340	348	58¼	.....	9	To be 400 feet on blocks and 17 feet over sill.
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Cleveland, Ohio	....do	325	340	55	.....	14	
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Detroit, Mich.	Detroit, Dry Dock Co.	365	378	79	90	16	Timber.
Detroit, Mich.	....do	245	245	48	48	8¼	Timber.
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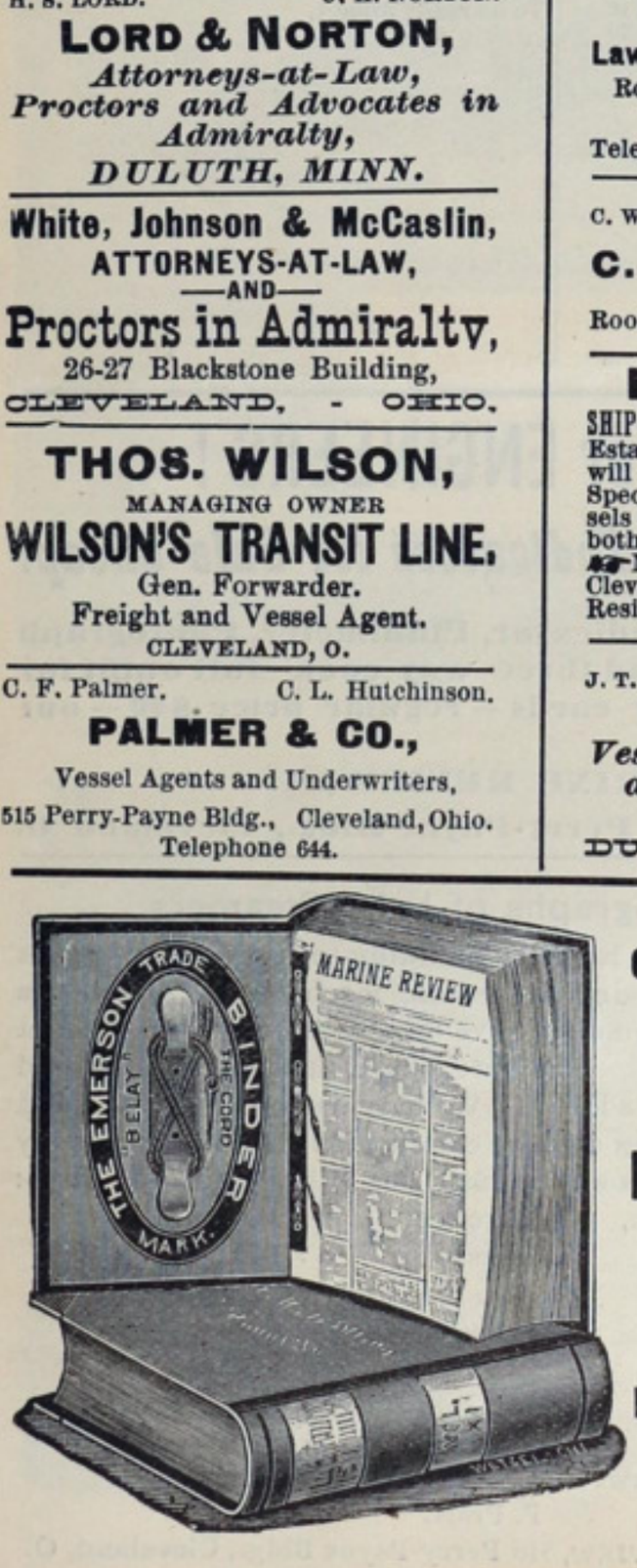

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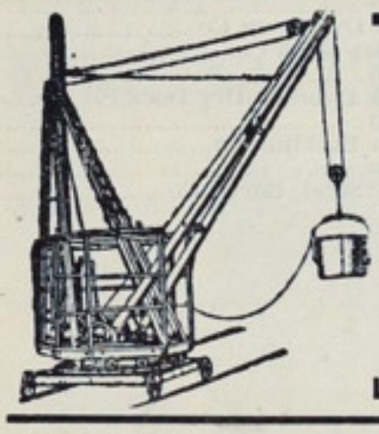

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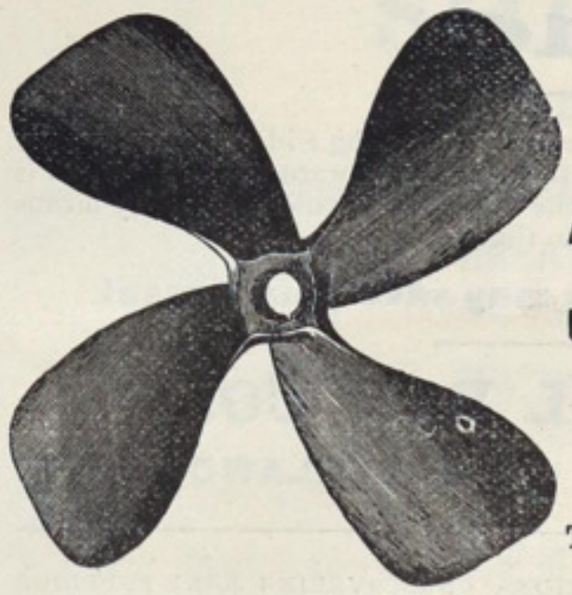

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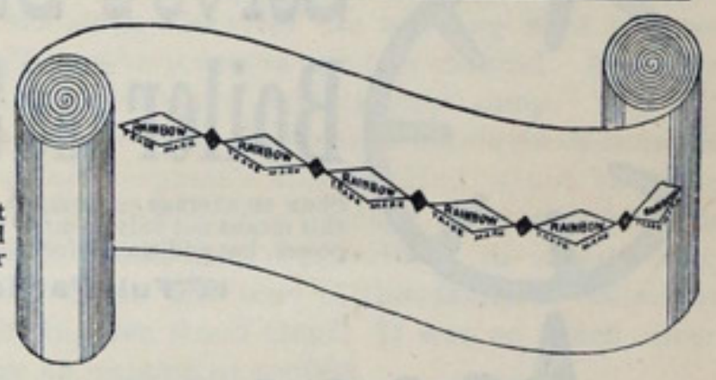

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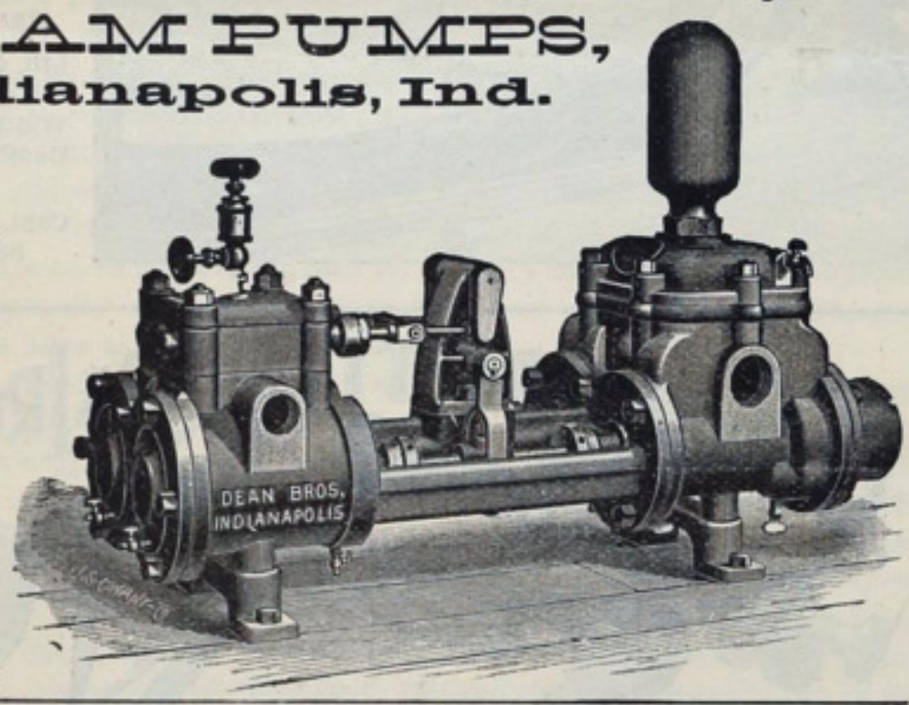

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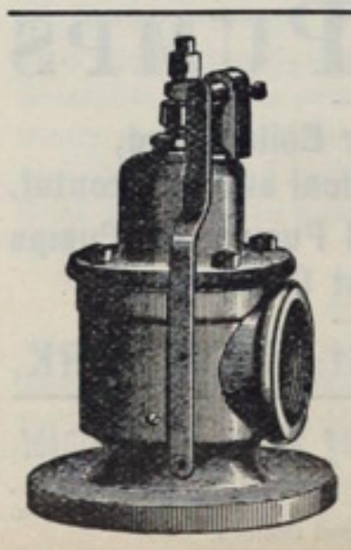

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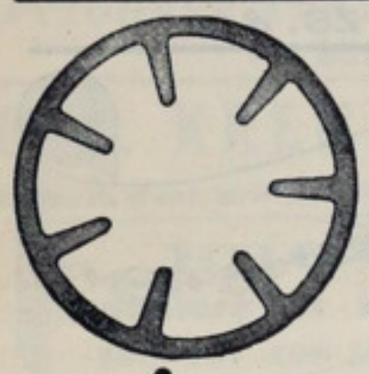

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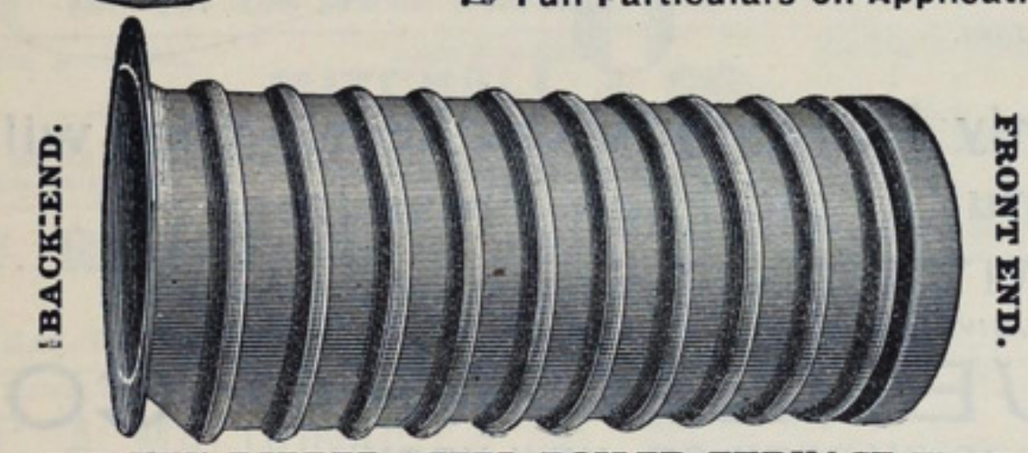

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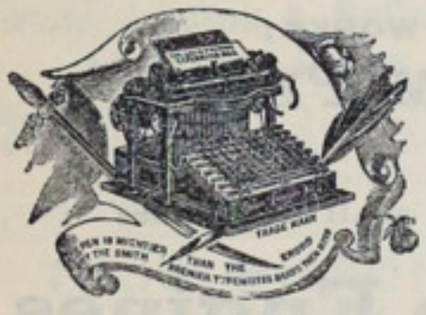

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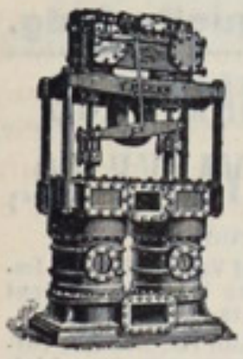

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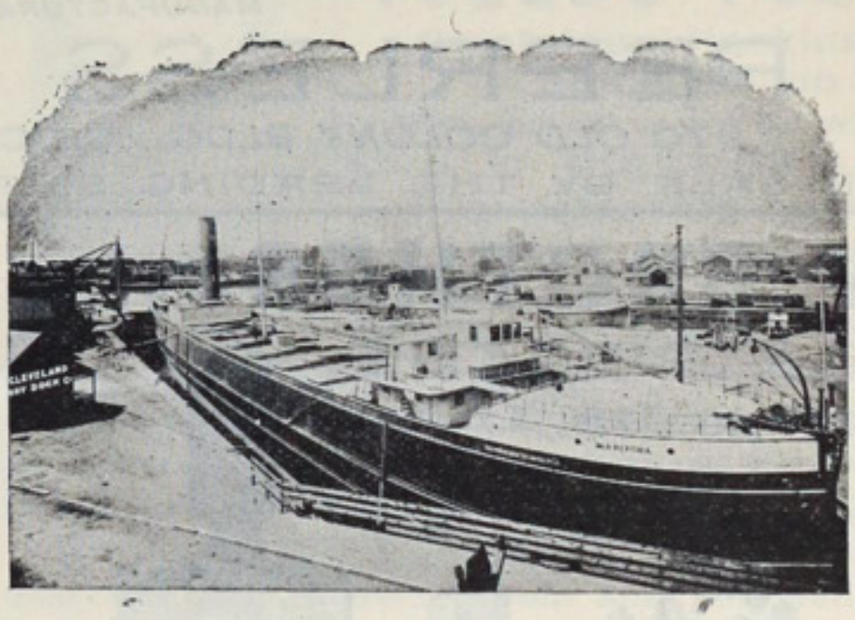

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